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ABSTRACT

The purpose of this Title I project was to improve the reading achievement of educationally disadvantaged students. Improvement was also anticipated in the areas of self-reliance, personal worth, attitudes toward reading, and attendance. The subjects, 144 second, third, and fourth graders, were selected on the basis of their scores on a district-wide achievement test, their teacher's recommendation, and an I.Q. at or above 85. Fifty second and third graders were selected to serve as a control group. The Slosson Oral Reading Test (SORT) and Stanford Achievement Test (SAT) were administeres as pre- and post-test measures. The SORT was only administered to the experimental group. Reading Resource Centers were set up as separate but cooperating units with one teacher and one educational assistant in each unit. Children attended the center one hour each day in groups of ten or less. Educational Developmental Laboratories' materials, "Listen, Look, and Learn," were used as the core for the program. The results warranted the following conclusions: A majority of the students had a 9 month or more gain in word meaning skills, self-reliance improved for a large percentage of the students, the attitudes of the students toward reading improved, and student attendance improved. (WR)

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a title 1 project

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READING RESOURCE CENTER
GLENDALE ELEMENTARY SCHOOL DISTRICT
A TITLE I PROJECT

by

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July, 1973

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Section I

Introduction

Educationally disadvantaged children of the Glendale Elementary School District showed apparent deficiencies in reading achievement. These deficiencies in reading achievement were revealed by scores on the Stanford Achievement Test and the Arizona Annual Third Grade Reading Test.

As early as 1965 the Glendale Elementary School District became aware of apparent deficiencies in reading achievement among educationally disadvantaged children and since that time the district has become more sensitive to the needs of these children. In 1972, the Parent Advisory Council unanimously agreed that a Supportive reading program be developed to improve the reading skills of educationally deprived children within the district.

Efforts were exerted in an attempt to find the "best" methods, materials and techniques of teaching reading. Such studies as those done or cited by Williams (1970), Tinker (1962), Meredith et. al. (1970), Harwood (1970), Sartain (1969), Weintraub (1971), and others indicated many fine remedial reading programs were in existence which employed a variety of methods and materials.

The literature indicated that remedial reading programs can bring about significant improvements in reading. However, it was also indicated that there is no one "best" method, program, or technique, and that what is best depends upon teacher, student, and classroom situation.

Thus, a degree of success seemed almost certain in using a "Reading Resource Center" approach. This approach would utilize

qualified reading resource teachers, a sound program of instruction and individual and small group.instruction. These would be employed with students with I.Q. scores which suggested they could profit from remedial instruction.

Goals and Objectives

The basic purpose of this Title I project was to improve the reading achievement of educationally disadvantaged students. Improvement was also anticipated in such areas as self reliance, personal worth, attitudes toward reading, and attendance.

In pursuing the above mentioned goals the following objectives were established:

1. By June 1, 1973, seventy percent of the selected children will make an eight month or more gain in reading grade placement as measured by pre-post test results on the Slosson Oral Reading Test.

2. By June 1, 1973, seventy percent of the selected children will show at least a moderate improvement (9 month gain) in: Word meaning, paragraph meaning, and word study skills as measured by pre-post test results of the Stanford Achievement Test.

3. A majority of the selected students, during the project, would show a gain in self reliance and personal worth as measured by pre-post test percentile scores on the appropriate subtests of the California Test of Personality.

4. By June 1, 1973, the selected students would show an improvement in their attitude toward reading as measured by pre-post test results of a reading attitude inventory.

5. Attendance patterns for the selected children would improve during the present school year when compared to the prior school year.

In addition to the above objectives it was hoped that the classroom teachers who have students participating in the Reading Resource Centers would have a positive reaction to the Reading Resource Centers as measured by a project developed survey instrument.

Definition of Terms

READING RESOURCE CENTERS: This is the name given the five instructional units formed to provide remedial reading instruction in the Glendale Elementary District. These Reading Centers are classrooms equipped and staffed for the teaching of reading.

EDUCATIONALLY DISADVANTAGED CHILDREN: These are the children from low income families scoring in the 4th stanine or below in reading on the Stanford Achievement Tests. These children are of normal ability (I.Q. of 85 or above) and were recommended by their classroom teachers.

Assumptions and Limitations

Students taking part in the Reading Resource Center Program were also part of a regular classroom and improvement in reading achievement, self reliance, personal worth, attendance, or attitudes toward reading might well reflect growth made outside the

centers. It must be assumed that the activities of the Reading Resource Centers contributed to improvements realized in these areas.

There is also the factor of maturation involved because of the one year span of time covered by the program. The use of a control group will aid in focusing attention on growth resulting from participation in the program relative to specific skills. However, a control group was not available for all comparisons. Thus, it must be assumed that growth in these areas reflect program contributions in excess of that realized due to normal maturation processes.

Because of the span of time involved not all students were part of the program for the entire year. Some students moved from the district during the year. Analysis was limited to those students for which pre and post test scores were available.

This project is limited to a single school district, the Glendale Elementary School District, and the findings of this study can only be generalized to districts which are comparable to this elementary district.

Section II

Methods and Procedures

In pursuing the objectives established for this project, standardized tests were administered, responses to an attitude inventory were collected, and prior and present year attendance figures were collected. In addition, classroom teacher's reactions to the project were sought. The data collected was analyzed in an effort to evaluate the effectiveness of the project.

Selection of Subjects

Students selected to attend the Reading Resource Centers were selected by means of several criteria.

Scores were used from a district-wide achievement test given in the spring of 1972. The test used was the Stanford Achievement Test (Form X)

All students participating in the Reading Resource Centers had to score in the fourth stanine or below on the reading portion of the test, and be recommended by their classroom teacher.

To qualify for the program, each of the target Students had to have an I.Q. of 85 or above. This was in an attempt to exclude slow or retarded children from the program and deal only with those children who were underachievers capable of increasing their reading achievements.

Eighty-six (86) second graders and 91 third graders, a total of 177 children, were initially selected to participate in the program. Actually 144 children participated in the project and this number included 16 fourth graders.

In addition to the children selected as target children, 50 second and third graders (35 second graders, 15 third graders) were selected as non-target children to serve as a control group. These children were to be compared to the target children specifically on word meaning, paragraph meaning, and word study skills. The standardized test scores for these children were available as a result of the district-wide testing program. These non-target children also fulfilled the criteria established for the target group children.

Identifying Disadvantaged Children

The Reading Resource Center program was a Title I program, and the centers were set up primarily to work with disadvantaged children.

Based upon the most recent data of the U.S. census bureau, numbers receiving aid for dependent children, and numbers receiving free school lunches, approximately 900 children from low income families were identified in the Glendale Elementary School District #40.

The three schools with the largest concentration of children from low income families were selected as target schools. They are the Unit I School, Isaac E. Imes School, and Harold W. Smith School.

Those students in the non-target group were selected from schools in the district which were comparable to the target schools in economic level and minority group membership. They were, however, selected in the the same manner as the target group children. They were underachievers in reading.

Reading Resource Centers

Centers were set up as separate but cooperating units with one teacher and one educational assistant in each unit. Each unit had no more than 30 children assigned to it. Children attended the center one hour each day in groups of ten or less.

Each teacher had four instructional hours a day, and all instruction was done on an individual basis or in small groups.

Educational Developmental Laboratories materials, "Listen,

Look, and Learn," were used as the central core for the program. Along with this program, use was made of the controlled reader, the look and write program, Tach-X recognition training, the Aud-X for word and skills introduction, and individual and small group reading.

This particular program was selected because: A core system was deemed desirable, EDL is adaptable to many different ages and reading needs, EDL could provide individualization in the program, and this program was totally different from the program used in the regular classroom.

The Reading Resource Centers were set up to deal with a child over a period of one year or more with stress placed upon the idea of success each day for each child.

The Reading Resource Centers' program was under the direction of one administrative director, with five reading specialists and five educational assistants manning the centers. Although each of the five units used the same basic materials, each reflected the individual personalities of the individuals working there. Widespread use of positive reinforcement was noticeable in each of the five centers.

Reading Achievement Measurement And Analysis Measurement

Two different instruments were used to measure reading achievement. Both the Slosson Oral Reading Test (SORT) and the Stanford Achievement Test (SAT) were administered as pre and post test measures.

The SORT is a relatively short test designed specifically and totally for reading. It is individually administered. Three

indicators of reading achievement are provided by this test; instructional level, independent level, and frustration level. For purposes of this project only the instructional level (a grade equivalent) was used for evaluation.

The SORT was administered in September, 1972 as a pre test to the target children only. It was again administered in May, 1973 to the target children as a post test.

The SAT (Form X) was administered as a pre test in May, 1972 and Form W was administered as a post test in May, 1973. Subtest scores for reading: word meaning, paragraph meaning, and word study skills, were recorded and utilized in the final analysis. Both target and non-target students were administered the Stanford Achievement Test battery as part of the district-wide testing program.

ANALYSIS: Since non-target students were not administered the Slosson Oral Reading Test, analysis was limited to caluclated: mean, median, range, and gains. Percentages and frequencies within reading gain classifications for individual grade levels were also calculated and analyzed relative to established objectives.

In an attempt to further evaluate the effectiveness of the Reading Resource Centers, the Reading achievement scores of the students participating in the Reading Resource Centers were compared with similar students who were instructed solely within the regular classroom.

Pre test scores for the target students and non-target students were compared by means of independent "t tests" to determine if there was any significant difference between the groups' three

subtest scores of the SAT.

Post test scores for the two groups were also compared by means of independent "t tests." Subtest score (SAT) were used to determine if there was any significant difference between the achievement of those underachievers attending the Reading Resource Centers for a year and those receiving insturction in their regular classrooms, not receiving any special remedial help.

Further analysis was conducted using reading achievement gains for the two groups on the three subtest scores of the Stanford Achievement Test. Significance was set at the .05 level for all t tests.

Self Reliance-Personal Worth Measurement and Analysis

The California Test of Personality (Form A) was administered in January, 1973 as a pre test. Although it was administered sometime after the project began, it was felt that even though only a short period of time would elapse between the pre test and post test the results would offer some indication of the ability of the Reading Resource Centers and the children's school environment to alter these children's self concept and feeling of personal worth over a relatively short period of time. The post test (Form B) was administered in May, 1973. Again these tests were only administered to the target children.

Percentile placements were determined for the target children on these two subtests of the California Test of Personality (CTP) for both the pre test and post test. Means and medians were determined, and frequencies and percentages for increases in percentile placements were utilized for evaluation relative to established objectives.

Reading Attitude Measurement and Analysis

A reading attitude inventory was administered as a pre test and post test to determine the ability of the Reading Resource Centers to alter the target children's attitude toward reading (See Appendix A).

The attitude inventory utilized consisted of eighteen statements related to reading. Students responded to the statements by circling yes, unsure, or no. A rating scale ranging from 1 (No) to 3 (yes) was selected to designate attitudes as positive or negative. A score from 1 to 1.67 represented a negative attitude, a score from 1.675 to 2.34 represented an uncertain or neutral attitude, and a score between 2.345 and 3.00 represented a positive attitude.

Means, medians and ranges were calculated for pre and post tests. Also, mean gain from pre to post test was determined. Mean attitude scores on pre and post tests were utilized for evaluation relative to the established objective.

Attendance Measurement and Analysis

Attendance patterns of children participating in the Reading Resource Centers was examined for the prior school year and the present school year in an effort to determine if attendance patterns changed for these children.

The total possible days of attendance for each school year was 176 days. The number of days a child attended each year was recorded for each child in the target group.

Means, medians, and ranges for days attended during the 1971-72 and 1972-73 school years were calculated as well as the mean gain/loss in days attended. The average number of days attended during these two school years was utilized for evaluation of the established objective.

Classroom Teacher Reaction to Reading Resource Centers.

Measurement and Analysis

A fourteen item (14) survey instrument was developed by the project evaluator to solicit classroom teachers' reactions to the Reading Resource Centers (See Appendix B). Only classroom teachers with students participating in the centers were surveyed.

Teachers' responses to the fourteen items on the survey instrument were tabulated. Frequencies of responses within classifications (e.g. Yes, No, Uncertain) were recorded as well as percentages. Percentages of responses (e.g. Yes) were utilized for evaluation relative to the established objective.

Section III

Results

Reading-Slosson Oral Reading Test:

A comparison of individual target students' pre and post test scores on the Slosson Oral Reading Test (SORT) indicated that of the 123 students who completed both tests 112 or 91.1% had made an eight month or more gain in reading grade placement (instructions level). Thus, as indicated by the results of the SORT, the project was successful in reaching objective 1.

> Objective 1: By June 1, 1973, seventy percent of the selected students will make an eight month or more gain in reading grade placement as measured by pre-post test results on the Slosson Oral Reading Test.

It was also found that the scores on the pretest ranged from .1 (1 month) to 3.9 (3 years 9 months). (See table I) The mean on the pre test was 1.6 and the median 1.4. On the post test the scores ranged from .7 to 7.5 with a mean of 3.4 and a median of 3.3 A break down of improvement by grade level is provided in Appendix C.

Table I
Results of Slosson
Oral Reading Test
Grade Level-Combination 2,3,&4

Pre Test	Post Test
N = 123	N = 123
Range - .1 to 3.9	Range - .7 to 7.5
Mean - 1.6	Mean - 3.4
Median - 1.4	Median - 3.3

Gain/Loss - + 1.8

Reading-Stanford Achievement Test:

A comparison of pre and post test scores on the Stanford Achievement Subtests of word meaning (WM) paragraph meaning (PM) and word study skills (WSS) revealed that 69 students or 56.1% made a 9 month or more gain in word meaning skills. Forth-eight (48) or 39% made a 9 month or more gain in paragraph meaning skills. A total of 50 or 40.7% of the target students made a 9 month or more gain in word study skills. Thus, as indicated by the results of the Stanford Achievement Test, the project was not successful in reaching objective 2.

> Objective 2: By June 1, 1973, seventy percent of the selected children will show at least a moderate improvement (.9 month gain) in: word meaning, paragraph meaning, and word study skills as measured by pre-post test results of the Stanford Achievement Test.

It was also found that the scores on the pretest: ranged from 1.0 to 3.3 for word meaning skills, ranged from 0 to 3.4 for paragraph meaning skills, and from 1 to 4.7 for word study skills (See Table II)

Scores on the post test: ranged from 1.2 to 4.7 for word study skills, from 1 to 4.4 for paragraph meaning skills from 1.2 to 6.7 for word study skills. (See table II)

Table II

Results of Stanford Achievement Test
Grade Level - Combination 2,3,&4

Subtest	Range		Mean		Median		Mean Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
WORD MEANING (WM)	1.0-3.3	1.2-4.7	1.8	2.7	1.7	2.7	+.9
PARAGRAPH MEANING (PM)	0-3.4	1.0-4.4	1.8	2.6	1.7	2.4	+.8
WORD STUDY SKILLS (WSS)	1-4.7	1.2-6.7	2.02	2.85	1.8	2.7	+.83

The pre test means on the SAT ranged from 1.8 for both word meaning and paragraph meaning subtests to 2.02 for word study skills. The post test means ranged from 2.6 for PM to 2.85 for WSS. The medians were approximately the same as the means (See Table II, above)

The mean gains are somewhat revealing in table II. On all three subtests the mean gains were eight months or more.

A break down of improvement by grade level for the three subtests of the SAT is provided in Appendix D.

In an attempt to further evaluate the effectiveness of the Reading Resource Centers relative to objective 2 previously stated, the reading achievement scores of the students participating in the Reading Resource Centers were compared with similar students remaining in the regular classroom. A comparison of Stanford Achievement subtest scores was made.

Test scores on the SAT were recorded in grade equivalents and compared by means of t tests. A comparison of the total groups in word meaning, paragraph meaning, and word study skills indicated that there were no significant differences between the two groups on either the pre or post test. A comparison of group gain scores also showed no significant difference for the three subtest scores. It was interesting to note that the gain mean scores for the target group were higher than the non-target group, but the differences were not enough to be significant.

In a further effort to determine if any significant differences did exist, the groups were divided into second and third graders and additional t tests were run. (All fourth graders in the target

group were excluded in this break-down).

Once again target and non-target groups were compared for word meaning, paragraph meaning, and word study skills and a comparison of pre tests, post tests, and mean gain scores was made. See table III for a list of grade equivalent means, comparisons, and t ratio's).

TABLE III
GRADE EQUIVALENT
MEANS AND T-RATIOS

GROUPS	WORD MEANING			PARAGRAPH MEANING			WORD STUDY SKILLS		
	PRE TEST	POST TEST	GAIN	PRE TEST	POST TEST	GAIN	PRE TEST	POST TEST	GAIN
TOTAL GROUPS									
CONTROL (N=50)	1.710	2.614	.904	1.746	2.508	.762	1.840	2.616	.776
EXPERI-MENTAL (N=123)	1.808	2.737	.929	1.794	2.572	.779	2.018	2.853	.835
T-RATIO	1.265	1.007	.405	.521	.488	.160	1.543	1.225	.382
SECOND GRADERS									
CONTROL (35)	1.594	2.274	.680	1.511	2.129	.631	1.557	2.086	.529
EXPERI-MENTAL (59)	1.480	2.344	.864	1.394	2.186	.792	1.585	2.661	1.076
T-RATIO	1.681	.613	1.813	1.568	.477	1.302	.325	2.934**	3.300*
THIRD GRADERS									
CONTROL (15)	1.980	3.407	1.427	2.293	3.360	1.067	2.500	3.853	1.353
EXPERI-MENTAL (49)	1.963	2.978	1.051	2.045	2.739	.694	2.267	2.943	.676
T-RATIO	.195	2.102*	1.857	2.196*	2.883**	1.785	1.199	2.431*	2.229*

*SIGNIFICANT TO .05 LEVEL **SIGNIFICANT TO .01 LEVEL

Second graders in the target group showed a significant difference in word study skills on the post test and in gains in word study skills at the .01 level of significance.

However, third graders in the non-target group did significantly better in word study skills than members of the target group.

Examining third graders on paragraph meaning and word meaning indicated there was a significant difference on both pre test and post test scores for paragraph meaning and for the post test for word meaning in favor of the non-target group. However, there was no significant differences revealed when gain scores were compared.

Self Reliance-Personal Worth:

The California Test of Personality (Form A) was administered as a pre test in January 1973, and form B was administered as a post test in May, 1973. Although this test was administered after the project was underway, the results offer some suggestions of program contributions to the target children.

A total of 125 children completed both pre and post tests. Scores were recorded as percentiles. The mean percentile placement on the pre test for the self reliance subtest was 41, and on the post test it was 65. This represents an increase of 24 percentile points. The mean percentile placement on the pre test for the personal worth subtest was 47.6, and on the post test it was 51.0. This represents an increase of only 3.4 percentile points.

The frequencies and percentages for target students who increased, decreased, or remainèd unchanged in their percentile

placements on the two subtests are presented in Table IV below.

Table IV

Results of California Test

of Personality Subtests

Self Reliance and Personal Worth

Analysis

Subtest	INCREASED		DECREASED		UNCHANGED	
	No.	%	No.	%	No.	%
Self Reliance	88	70.4	19	15.2	18	14.4
Personal Worth	62	49.6	44	35.2	19	15.2

A sizeable percentage of target students increased their percentile placement on the self reliance subtest (70.4%). However, the 49.6% who increased in their percentile placement on the personal worth subtest falls short of the majority which was desired.

Thus, the project was successful in reaching half of objective 3 and fell just short of reaching the other half.

Objective 3: A majority of the selected students, during the project, would show a gain in self reliance and personal worth as measured by pre-post test percentile scores on the appropriate subtests of the California Test of Personality.

Reading Attitude: A reading attitude inventory was administered as a pre-post test to determine if target children's attitude toward reading changed during the period while they were involved

in the Reading Resource Center program.

The attitude inventory was utilized with a rating scale ranging from 1 to 3; with a score between 1 and 1.67 representing a negative attitude, a score between 1.675 or 2.34 representing an uncertain or neutral attitude, and a score between 2.345 and 3.00 representing a positive attitude. The results of the analysis of the attitude inventory scores appears in table V below.

Table V

Results of Reading

Attitude Inventory Analysis

	Pre Test	Post Test
Number	121	121
Range	1.5 - 3.0	1.78 - 3.0
Median	2.30	2.61
Mean	2.33	2.58
Mean Gain/Loss	+.25	

The children's attitude prior to beginning work in the Reading Resource Centers was uncertain or neutral. It was however very close to be being classified as positive. The change or gain in attitude, although not large, was sufficient to change the children's attitude to one which was positive in nature.

This suggests that the Reading Resource Centers were successful in changing these children's attitude toward reading in a positive

direction. Thus, objective 4 was realized.

Objective 4: By June 1, 1973, the selected students would show an improvement in their attitude toward reading as measured by pre-post test results of a reading attitude inventory.

Attendance: An analysis of the attendance patterns of children participating in the project for the prior school year and the present school year revealed that the average number of days attended during the present school year increased for these children. (See Table VI below).

Table VI

Target Children

Attendance 1971-7[illegible]

Compared to 1972-73

(Days Attended)

School Year	No.	Range	Median	Mean	Mean Gain/Loss
1971-72	120	43.5-176	166.75	159.65	+6.83
1972-73	120	132-176	169	166.479	

Attendance figures were available for 120 of the target children for the 1971-1972 and 1972-73 school years. The total days it was possible for a student to attend during these two years was 176 days. The target students attended an average of approximately 160 days during the 1971-72 school year and approximately 166 days during the 1971-72 school year. These figures represent an

increase of 6 and almost 7 days for the present school year.

Thus it must be concluded that the project was successful in achieving improved attendance patterns and objective 5.

Objective 5: Attendance patterns for the selected children would improve during the present school year when compared to the prior school year.

Classroom Teachers Reaction

An instrument was developed to determine the reactions of classroom teachers to the reading resource centers. (See Appendix B). Only classroom teachers with students participating in the centers were surveyed.

A total of thirty-one (31) classroom teachers had students participating in the centers. Each of them received a copy of the instrument for their responses. Twenty-eight (28) of these teachers returned the survey instrument. This represents a 90.3% rate of return.

An analysis of the data which appears in the table on the following page reveals that a sizeable percentage of the classroom teachers feel these children:

1. Appear to be educationally disadvantaged
2. Profitted from the reading centers
3. Improved their reading skills
4. Have a more positive attitude towards reading, school,
5. Have had their interest in reading change in a positive direction
6. Have more desirable work study habits
7. More inclined to become engaged in independent reading
8. More inclined to become engaged in leisure or free reading
9. Take pride in their work and accomplishments
10. Have improved in self-image

11. Were anxious to attend the reading centers
12. Have improved in their reading skills as a result of their reading center experiences.

Less than a majority of the classroom teachers (48%) felt these children had a more positive attitude toward their classmates, and forty percent (40%) were uncertain if the children had a more positive attitude toward their classmates.

A sizeable percentage (75%) felt the reading resource centers program was a beneficial program which fulfilled basic reading needs of children, and should be used to benefit more children. Generally, these classroom teachers are supportive of the five (5) reading centers and recognize that they contribute to the improvement of the reading skills of disadvantaged children.

TABLE VII
CLASSROOM TEACHER RESPONSES TO
SURVEY ITEMS RELATED TO READING
RESOURCE CENTERS

NO.	ITEM	RESPONSE YES NO	YES %	NO NO	NO %	UNCERTAIN NO	UNCERTAIN %
1.	IN YOUR BEST ESTIMATION, DO THESE CHILDREN APPEAR TO BE EDUCATIONALLY DISADVANTAGED?	23	85.2	3	11.1	1	3.7
2.	DO YOU FEEL THESE CHILDREN HAVE GENERALLY PROFITTED FROM THE READING CENTERS?	25	89.3	1	3.6	2	7.1
3.	DO YOU FEEL THESE CHILDREN HAVE IMPROVED THEIR READING SKILLS?	24	85.7	2	7.1	2	7.1
4.	DO YOU FEEL THESE CHILDREN HAVE A MORE POSITIVE ATTITUDE TOWARDS THE FOLLOWING AS A RESULT OF THEIR EXPERIENCE?						
	(a) READING	27	100.0	0	0	0	0
	(b) SCHOOL	23	85.2	2	7.4	2	7.4
	(c) CLASSMATES	12	48.0	3	12.0	10	40.0
	(d) OTHER SUBJECTS	18	72.0	4	16.0	3	12.0
5.	DO YOU FEEL THESE CHILDREN'S INTEREST IN READING HAS CHANGED IN A POSITIVE DIRECTION DURING THIS SCHOOL YEAR?	24	88.9	1	3.7	2	7.4
6.	DO YOU FEEL THESE CHILDREN HAVE MORE DESIRABLE WORK STUDY HABITS AS A RESULT OF THEIR EXPERIENCE?	19	70.4	5	18.5	3	11.1
7.	DO YOU FIND THESE CHILDREN MORE INCLINED TO BECOME ENGAGED IN INDEPENDENT READING AS A RESULT OF THEIR EXPERIENCE?	15	53.6	7	25.0	6	21.4
8.	DO YOU FIND THESE CHILDREN MORE INCLINED TO PICK UP A BOOK, PAMPHLET, ETC. FOR PURPOSES OF LEISURE OR FREE READING THAN THEY WERE BEFORE?	16	57.1	7	25.0	5	17.9
9.	DO YOU FIND THAT THESE CHILDREN TAKE PRIDE IN THEIR WORK AND ACCOMPLISHMENTS?	24	85.7	2	7.1	2	7.1
10.	DO YOU FEEL THAT THESE CHILDREN'S SELF-IMAGE HAS IMPROVED DURING THIS SCHOOL YEAR?	19	67.9	3	10.7	6	21.4
12.	DO YOU FEEL THESE CHILDREN WERE ANXIOUS TO COME TO THE READING CENTERS?	24	85.7	0	0	4	14.3
13.	IN GENERAL, DO YOU FEEL THAT THE READING CENTERS ARE CONTRIBUTING TO THE IMPROVEMENT OF THESE CHILDREN'S READING SKILLS?	26	92.9	0	0	2	7.1

11. HOW WOULD YOU DESCRIBE THESE CHILDREN'S ATTENDANCE DURING THIS SCHOOL YEAR?

RESPONSE	NO	%
EXCELLENT	14	50.0
GOOD	6	21.4
AVERAGE	7	25.0
FAIR	0	0.0
POOR	1	3.6
TOTAL	28	100.0

TABLE VII (Continued)

14. WOULD YOU GIVE YOUR OVERALL REACTION TO THE READING CENTER BY CHOOSING ONE OF THE FOLLOWING:	NO. RESPONDING	%
(a) A BENEFICIAL PROGRAM WHICH IS FULFILLING BASIC READING NEEDS OF CHILDREN, AND SHOULD BE USED TO BENEFIT MORE CHILDREN.	21	75.0
(b) A BENEFICIAL PROGRAM WHICH IS FULFILLING BASIC READING NEEDS OF CHILDREN, BUT WHICH SHOULD BE RESTRICTED TO A LIMITED NUMBER OF CHILDREN WITH SEVERE READING PROBLEMS.	5	17.9
(c) A PROGRAM WITH LIMITED BENEFITS TO CHILDREN IN OUR DISTRICT, AND IN NEED OF MAJOR REVISION.	2	7.1
(d) A PROGRAM WHICH OFFERS LITTLE OR NO OPPORTUNITY FOR CHILDREN TO IMPROVE THEIR BASIC READING SKILLS, AND SHOULD BE ABANDONED	0	0.0

Total group scores on the pre test and the post test in word meaning, paragraph meaning, and word study skills revealed no significant differences between the target and non-target groups. A comparison of gains also showed no significant differences. Only by breaking the groups down into second and third grade students could any significant differences be found. There were significant differences in favor of the target group for second grade students on the word study skills post test and gains.

There were significant differences found in the third grade students' scores, but these differences were in favor of the non-target group. There was a significant difference beyween the two groups in word meaning on the post test, and in paragraph meaning on the pre test and post test. In both cases, word meaning and paragraph meaning, there was no significant differences revealed when gains were compared for third graders. The favor appears in the significant differences in scores found in word study skills for the post test and student gains.

Summary of Results

Various instruments were used and data collected in an effort to obtain meaningful information regarding the effectiveness of the Reading Resource Centers. Used in this evaluation were:

Slosson Oral Reading Test
Standord Achievement Test
California Test of Personality
Reading Attitude Inventory
Attendance Records (Previous and Present Years)
Classroom Teacher Survey

SIGNIFICANT FINDINGS

Slosson Oral Reading Test:

The average gain (9/72 - 5/73) in reading achievement was 1 year 8 months. Ninty-one percent (91%) of the students in the Reading Resource Centers made an 8 month or more gain in reading grade placement, and 90.2% made a 9 month or more gain in reading grade placement.

Stanford Achievement:

Word Meaning Subtest - Average gain was 9 months.

Paragraph Meaning Subtest - Average gain was 8 months.

Word Study Skills Subtest - Average gain was 8 months.

Fifty-Six percent (56%) of the target children made a 9 month or more gain in grade level placement in word meaning skills.

Thirty-nine percent (39%) made a 9 month or more gain in grade level placement in paragraph meaning skills.

Forty-one percent (41%) made a 9 month or more gain in grade level placement in word study skills.

Additional analysis were made using the SAT test scores of target students and non-target students.

California Test of Personality:

Seventy percent (70%) of the target children increased in their percentile placement between pre and post testing on self reliance. Approximately fifty percent (49.6) increased in their percentile placement between pre and post testing on personal worth.

Reading Attitude Inventory:

In September 1972, the target children's attitude toward

reading was found to be uncertain or neutral. It was however, close to positive. Their attitude at the time of post testing (5/73) was positive, with a gain realized since the pre test.

Attendance Records:

The average gain in days attended between last year's and this year's attendance was 6.83 days. These students attended an average of 159.65 days last year; this year they attended an average of 166.479 days.

Classroom Teacher Survey:

A majority of the classroom teachers surveyed were supportive of the five (5) Reading Resource Centers and recognize that they contribute to the improvement of the reading skills of these disadvantaged children.

It was interesting to note that 75% of the teachers surveyed felt the Reading Resource Center Program was a beneficial program which fulfilled basic reading needs of children, and they felt the program should be used to benefit more children.

Section IV

Summary, Conclusions, Recommendations

Summary of Project

Reading Resource Centers were set up in the Glendale Elementary School District in 1973. They were a "Title I project" designed to meet the educational needs of educationally disadvantaged children. A large number of educationally disadvantaged students were found to have reading deficiencies, for this reason three schools in low economic areas were selected as target schools. A total of five Reading Resource Centers were established, each with one reading specialist and one educational assistant working together in each center. All centers made use of the Educational Developmental Laboratories program and materials, "Listen, Look, and Learn", and functioned independently but cooperatively under the direction of a district director.

Students attended the centers one hour each day during the entire school year. Never more than 10 students were in the centers at one time and each teacher was limited to four instructional periods.

Target students, fulfilling selection criteria, were second and third grade students with a small number of fourth graders also participating. Similar students from comparable schools who fulfilled the selection criteria and not attending the Reading Resource Centers, were selected to compare with the target students on district-wide standardized test scores.

Five basic objectives were established for the project, project staff, and students. They were as follows:

1. By June 1, 1973, seventy percent of the selected children will make an eight month or more gain in reading grade placement as measured by pre-post test results on the Slosson Oral Reading Test.

2. By June 1, 1973, seventy percent of the selected children will show at least a moderate improvement (9 month gain) in: Word meaning, paragraph meaning, and word study skills as measured by pre-post test results of the Stanford Achievement Test.

3. A majority of the selected students, during the project, would show a gain in self reliance and personal worth as measured by pre-post test percentile scores on the appropriate subtests of the California Test of Personality.

4. By June 1, 1973, the selected students would show an improvement in their attitude toward reading as measured by pre-post test results of a reading attitude inventory.

5. Attendance patterns for the selected children would improve during the present school year when compared to the prior school year.

In addition to the above objectives it was hoped that the classroom teachers who have students participating in the Reading Resource Centers would have a positive reaction to the Reading Resource Centers as measured by a project developed survey instrument.

Conclusions:

In view of the results, the following conclusions are advanced:

1. The Reading Resource Centers have been successful improving the reading grade level achievement for the target students as measured by the Slosson Oral Reading Test.

2. Stanford Achievement Test analysis suggests:

   a. A majority of the target students realized a 9 month or more gain in word meaning skills, but a majority of the target students did not realize a 9 month or more gain in paragraph meaning or word study skills.

   b. The Reading Resource Centers have been effective in providing second grade target students with better word study skills.

   c. The Third grade students participating in the Reading Resource Centers did not realize as much word study skill achievement as their counterparts who remained in the regular classroom.

   d. The Reading Resource Centers have not provided the target students with word meaning, paragraph meaning, and word study skills to a greater extent than those which would have been provided in the regular classroom as measured by the Stanford Achievement Test.

3. The Reading Resource Centers have contributed to an increase in self reliance for a sizeable percentage of the target students over a relatively short period of time. However, during this same short period of time the Reading Resource Centers have

not contributed to an increase in feelings of personal worth for a majority of their participants.

4. The Reading Resource Centers have been successful in improving the attitudes of the target students toward reading, and have succeeded in generating a positive attitude in these children.

5. The Reading Resource Centers have also contributed to better attendance patterns for the target children.

6. Classroom teachers with children participating in the Reading Resource Centers are supportive of the five (5) reading centers and recognize that they contribute to the improvement of the reading skills of disadvantaged children.

Recommendations

Evidence from previous research indicates that significant gains are usually made by students taking part in programs similar to the Reading Resource Center program pursued in this project. It is also recognized that evidence presented in this study indicates the Reading Resource Center program as it is functioning in the Glendale Elementary School District is a sound remedial reading program.

The knowledge gained during this project year can be built upon, revisions can be made, and ultimately greater gains realized in the future.

In view of the limitations recognized in this study and potential for future growth, the following recommendations are offered:

1. It is recommended that a more sensitive instrument be utilized which measures reading specifically and totally and is administered individually. The Seventh Mental Measurements Yearbook (1972) points out that a weakness of the Stanford Achievement Test is that scores represent right responses, without correction for guessing or chance factors. It is possible for a student by guessing and without reading the test at all to obtain an unrealistic grade equivalent score. An individually administered test would provide more valid measurement of the target student's reading grade placement.
2. It is recommended that evaluation of target student benefits received from a program such as Reading Resource Centers might be more validly by evaluated utilizing an anticipated growth or gain based upon an average gain or growth established over prior years and indicated by the pre test achievement score.
3. It is recommended that a new, more sensitive, instrument be sought to measure self concept. This instrument should be administered as a pre test at the beginning of the project and as a post test at the conclusion of the project.
4. It is recommended that students from regular classrooms who are in the same classroom as the target students be administered an instrument such as outlined in number 1 above as would be target students. These two groups could then be compared to each other in a manner as outlined in number 2 above.

5. Finally, it is recommended that attempts be made to evaluate the effectiveness of programs such as the Reading Resource Centers by involving parents early in the project and soliciting pre and post evaluations from these parents as to the change or growth they recognize in their own children.

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APPENDIX A

READING ATTITUDE INVENTORY

GLENDALE ELEMENTARY SCHOOLS

READING RESOURCE CENTERS

NAME _____

SCHOOL _____

READING ATTITUDE SCALE

Please check one: ___ Pretest ; ___ Posttest

Score: Number of YES responses _____ X 3 = score _____
Number of UNSURE _____ X 2 = _____
Number of NO _____ X 1 = _____

Total score _____

Please circle YES, UNSURE, OR NO.

1. READING IS FOR LEARNING? YES UNSURE NO
2. READING IS FUN? YES UNSURE NO
3. BOOKS ARE BORING? YES UNSURE NO
4. SHARING BOOKS IN CLASS IS A WASTE OF TIME? YES UNSURE NO
5. READING IS ONLY FOR PEOPLE WHO WANT TO GET GOOD GRADES? YES UNSURE NO
6. BOOKS ARE USUALLY GOOD ENOUGHT TO FINISH? YES UNSURE NO
7. MOST BOOKS ARE TOO LONG AND NOT INTERESTING? YES UNSURE NO
8. READING IN YOUR SPARE TIME DOESN'T TEACH ANYTHING? YES UNSURE NO
9. YOU SHOULD ONLY READ BOOKS IN SCHOOL? YES UNSURE NO
10. READING IS SOMETHING I DON'T NEED? YES UNSURE NO
11. MONEY SPENT ON BOOKS IS NOT WAISTED? YES UNSURE NO
12. READING IS A GOOD WAY TO SPEND SPARE TIME? YES UNSURE NO
13. READING IS IMPORTANT TO ME? YES UNSURE NO
14. THERE SHOULD BE MORE TIME FOR SPARE TIME READING DURING THE SCHOOL DAY? YES UNSURE NO
15. THERE ARE MANY BOOKS WHICH I WOULD LIKE TO READ? YES UNSURE NO
16. READING SHOULD BE A PART OF YOUR SUMMER VACATION? YES UNSURE NO
17. BOOKS MAKE GOOD PRESENTS? YES UNSURE NO
18. BOOKS CAN BECOME SPECIAL FRIENDS? YES UNSURE NO

APPENDIX B

CLASSROOM TEACHER SURVEY
and
COVERLETTER

APPENDIX B

ARIZONA STATE
UNIVERSITY
TEMPE, ARIZONA 85281
COLLEGE OF EDUCATION

Dear Fellow Teacher:

As you realize we have been involved in a Title I project under which our Reading Resource Centers were funded for this year. We would like for you to aid us in evaluating our program and Reading Centers.

Would you please take a few minutes to reflect upon your students who have participated in the Reading Centers. The attached form is iesigned for you to record your observations and assessment of these students and to make comments when necessary.

We have tried to develop this instrument with our objectives in view. You will have had opportunities to observe the Reading Resource Center children in situations which are not covered in the instrument. Please feel free to add your comments to the instrument.

Thank you for your assistance.

Dr. Stanley R. Wurster
Title I Evaluator

PS. Please return directly to me in the enclosed envelope.

APPENDIX B

Glendale Elementary School
Reading Resource Centers
Teacher Survey

The goal of our Reading Centers and Title I project is to improve the reading performance for educationally disadvantaged children in grades two and three. Our objectives are designed to attain this goal. Please record your reactions, observations, and assessments relative to those children who have participated in the program the best you can.

1. In your best estimation, do these children appear to be educationally disadvantaged:
   Yes _____ No _____ Uncertain _____

   Comment:

2. Do you feel these children have generally profitted from the Reading Centers?
   Yes _____ No _____ Uncertain _____

   Comment:

3. Do you feel these children have improved their reading skills?
   Yes _____ No _____ Uncertain _____

   Comment:

4. Do you feel these children have a more positive attitude towards the following as a result of their experience?
   (a) Reading: Yes _____ No _____ Uncertain _____
   (b) School: Yes _____ No _____ Uncertain _____
   (c) Classmates: Yes _____ No _____ Uncertain _____
   (d) Other Subjects: Yes _____ No _____ Uncertain _____

   Comment:

APPENDIX B

5. Do you feel these children's interest in reading has changed in a positive direction during this school year?
Yes _____ No _____ Uncertain _____

Comment:

6. Do you feel these children have more desirable work study habits as a result of their experience?
Yes _____ No _____ Uncertain _____

Comment:

7. Do you find these children more inclined to become engaged in independent reading as a result of their experience?
Yes _____ No _____ Uncertain _____

Comment:

8. Do you find these children more inclined to pick up a book, pamphlet, etc. for purposes of leisure or free reading than they were before?
Yes _____ No _____ Uncertain _____

Comment:

9. Do you find that these children take pride in their work and accomplishments?
Yes _____ No _____ Uncertain _____

Comment:

10. Do you feel that these children's self-image has improved during this school year?
Yes _____ No _____ Uncertain _____

Comment:

APPENDIX B

11. How would you describe these children's attendance during this school year?
Excellent _____ Good _____ Average _____
Fair _____ Poor _____

Comment:

12. Do you feel these children were anxious to come to the Reading Centers?
Yes _____ No _____ Uncertain _____

Comment:

13. In general, do you feel that the reading centers are contributing to the improvement of these children's reading skills?
Yes _____ No _____ Uncertain _____

Comment?

14. Would you give your overall reaction to the Reading Center by choosing one of the following:

_____(a) A beneficial program which is fulfilling basic reading needs of children, and should be used to benefit more children.

_____(b) A beneficial program which is fulfilling basic reading needs of children, but which should be restricted to a limited number of children with severe reading problems.

_____(c) A program with limited benefits to children in our district, and in need of major revision.

_____(d) A program which offers little or not opportunity for children to improve their basic reading skills, and should be abandoned.

APPENDIX C

SLOSSON ORAL READING TEST

IMPROVEMENT - GRADES 2,3, and 4

Appendix C

SLOSSON ORAL READING TEST - INSTRUCTIONAL LEVEL - Improvement
Grades 2,3, and 4

	A SUBSTANTIAL 1.5 or more		B MARKED 1.0 - 1.4		C MODERATE .5 to .9		D LITTLE OR NO 0 to .4		TOTALS
GRADES	NO.	%	NO.	%	NO.	%	NO.	%	NO.
1									
2	34	57.6	18	30.5	7	11.9	0	0	59
3	26	53.1	15	30.6	8	16.3	0	0	49
4	10	66.7	4	26.7	1	6.7	0	0	15
5									
6									
7									
8									
9									
10									
11									
12									
Totals	70	56.9	37	30.1	16	13.0	0	0	123

APPENDIX D

STANFORD ACHIEVEMENT TEST

IMPROVEMENT - GRADES 2, 3, and 4

SUBTESTS - WORD MEANING, PARAGRAPH MEANING, WORD STUDY SKILLS

APPENDIX D

READING IMPROVEMENT

STANFORD ACHIEVEMENT TEST

WORD MEANING, PARAGRAPH, MEANING, WORD STUDY SKILLS

GRADES 2, 3, and 4

Word Meaning Subtest

	A Substantial 1.5 or more		B Marked 1.0 - 1.4		C Moderate .5 to .9		D Little or No 0 to .4		Totals
GRADE	No.	%	No.	%	No.	%	No.	%	No.
2	5	8.5	24	40.7	16	27.1	14	23.7	59
3	13	26.5	14	28.6	14	28.6	8	16.3	49
4	2	13.3	3	20.0	10	66.7	0	0.0	15
TOTALS	20	16.3	41	33.3	40	32.5	22	17.9	123

Paragraph Meaning Subtest

	A Substantial 1.5 or more		B Marked 1.0 - 1.4		C Moderate .5 to .9		D Little or No 0 to .4		Totals
GRADE	No.	%	No.	%	No.	%	No.	%	No.
2	7	11.9	14	23.7	19	32.2	19	32.2	59
3	6	12.2	7	14.3	16	32.7	20	40.8	49
4	2	13.3	5	33.3	6	40.0	2	13.3	15
TOTALS	15	12.2	26	21.1	41	33.3	41	33.3	123

Word Study Skills Subtest

	A Substantial 1.5 or more		B Marked 1.0-1.4		C Moderate .5 to .9		D Little or No 0 to .4		Totals
GRADE	No.	%%	No.	%	No.	%	No.	%	No.
2	17	28.8	11	18.6	17	28.8	14	23.7	59
3	6	12.2	7	14.3	13	26.5	23	46.9	49
4	2	13.3	1	6.7	2	13.3	10	66.7	15
TOTALS	25	20.3	19	15.4	32	26.0	47	38.2	123